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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/501,370 | 07/14/2004 | Thierry Colcou | Cabinet -02 | 7593 |

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| EXAMINER | |
|---|---|
| LE, TOAN M | |
| **ART UNIT** | **PAPER NUMBER** |
| 2863 | |

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| 11/26/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/501,370 | COLEOU, THIERRY | |
| | Examiner | Art Unit | |
| | Toan M. Le | 2863 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 July 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/28/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/28/07 has been entered.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by "Kriging Analysis of Geochemical Data", Sandjivy [(referred hereafter Sandjivy); The English translation version; the original French version is provided by Applicant].

Referring to claim 1, Sandjivy discloses a method of filtering at least two series of seismic data representative of the same zone, the method being characterized by determining an estimate of the component that is common to the data series, and deducing a resolution of these data series from the estimate, the resoluation of the data series being used for determining the topography of the subsoil (pages 3-5, B- Naturalist presentation section; pages 9-10, D- Application example section; pages 12-14, 2- Presentation of the results section; pages 14-15, 3- Study of the results section).

As to claim 2, Sandjivy discloses a method according to claim 1, characterized by determining a cross variogram of these data series and solving the co-kriging equation, which results in automatically deducing an estimate of the component that is common to the data series (pages 3-5, B- Naturalist presentation section; pages 5-8, C- Theory section).

Referring to claim 3, Sandjivy discloses a method according to claim 2, characterized by determining the orthogonal residues for the various data series by subtracting the estimated common component from each of the data series (page 7, lines 9-18; page 8, lines 1-14).

As to claim 4, Sandjivy discloses a method according to claim 3, characterized by implementing kriging analysis to resolve said orthogonal residues (page 7, lines 9-18; page 8, lines 1-14).

Referring to claim 5, Sandjivy discloses a method of processing seismic data, comprising: comparing two series of seismic data corresponding, for the same zone, to grids of at least one common attribute obtained for two distinct values of at least one given parameter, said comparing including filtering at least two series of seismic data representative of the same zone by determining an estimate of the component that is common to the data series, and deducing a resolution of these data series from the estimate (pages 3-5, B- Naturalist presentation section; pages 9-10, D- Application example section; pages 12-14, 2- Presentation of the results section; pages 14-15, 3- Study of the results section).

As to claim 6, Sandjivy discloses a method of filtering at least one series of seismic data representative of at least one zone, the method being characterized by identifying a model of a component of three-dimensional variability of its variogram, subtracting said model from the experimental variogram, and solving the kriging equation corresponding to the different

variograms in order to deduce an estimate of the corresponding variability component on the data series (pages 3-5, B- Naturalist presentation section; pages 9-10, D- Application example section; pages 12-14, 2- Presentation of the results section; pages 14-15, 3- Study of the results section).

Referring to claim 7, Sandjivy discloses a method of processing seismic data, comprising: comparing two series of seismic data corresponding, for the same zone, to grids of at least one common attribute obtained at two different instants, said comparing including filtering at least two series of seismic data representative of the same zone by determining an estimate of the component that is common to the data series, and deducing a resolution of these data series from the estimate (pages 3-5, B- Naturalist presentation section; pages 9-10, D- Application example section; pages 12-14, 2- Presentation of the results section; pages 14-15, 3- Study of the results section).

As to claim 8, Sandjivy discloses a method according to claim 1, characterized by determining the orthogonal residues for the various data series by subtracting the estimated common component from each of the data series (page 7, lines 9-18; page 8, lines 1-14).

Referring to claim 9, Sandjivy discloses a method according to claim 8, characterized by implementing kriging analysis to resolve said orthogonal residues (page 7, lines 9-18; page 8, lines 1-14).

As to claim 10, Sandjivy discloses a method according to claim 5, characterized by determining a cross variogram of these data series and solving the co-kriging equation, which results in automatically deducing an estimate of the component that is common to the data series (pages 3-5, B- Naturalist presentation section; pages 5-8, C- Theory section).

Referring to claim 11, Sandjivy discloses a method according to claim 5, characterized by determining the orthogonal residues for the various data series by subtracting the estimated common component from each of the data series (page 7, lines 9-18; page 8, lines 1-14).

As to claim 12, Sandjivy discloses a method according to claim 11, characterized by implementing kriging analysis to resolve said orthogonal residues (page 7, lines 9-18; page 8, lines 1-14).

Referring to claim 13, Sandjivy discloses a method according to claim 7, characterized by determining a cross variogram of these data series and solving the co-kriging equation, which results in automatically deducing an estimate of the component that is common to the data series (pages 3-5, B- Naturalist presentation section; pages 5-8, C- Theory section).

As to claim 14, Sandjivy discloses a method according to claim 7, characterized by determining the orthogonal residues for the various data series by subtracting the estimated common component from each of the data series (page 7, lines 9-18; page 8, lines 1-14).

Referring to claim 15, Sandjivy discloses a method according to claim 14, characterized by implementing kriging analysis to resolve said orthogonal residues (page 7, lines 9-18; page 8, lines 1-14).

***Response to Arguments***

Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan M. Le whose telephone number is (571) 272-2276. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Toan Le

November 15, 2007

John Barlow
Supervisory Patent Examiner
Technology Center 2800